

# (12) UK Patent Application (19) GB (11) 2 346 176 (13) A

(43) Date of A Publication 02.08.2000

(21) Application No 9901800.4

(22) Date of Filing 28.01.1999

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(51) INT CL<sup>7</sup>  
F02M 27/04

(52) UK CL (Edition R )  
F1B B2L4X

(56) Documents Cited  
GB 2290110 A US 5829420 A US 5236670 A

(58) Field of Search  
UK CL (Edition Q ) F1B B2L4X  
INT CL<sup>6</sup> F02M 27/04  
online: EPODOC, JAPIO, WPI, TXTUS, TXTEP, TXTGB,  
TXTWO

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(54) Abstract Title

**Microprocessor-controlled fuel energizer with magnetic field produced by a coil**

(57) The fuel energizer has a body 1, which houses the electronic components including the microprocessor. The cable 3 is wound around the main fuel line within a vehicle to form a closed loop coil 3(A), and is plugged into the unit 1 via the plug 4 and socket 2. The supply cables 5 are then connected to the battery of the vehicle, to power the unit. The status light 6 will then start to flash to indicate that the unit is functioning correctly. Once the unit has been installed, the computer program will first check whether the unit has been installed correctly; if so the computer will start to generate a swept frequency output signal that is amplified by a power transistor, which supplies the signal to the output coil. The output signal will sweep up from 1 kHz until it reaches 7.5 kHz, and then starts to sweep down from 7.5 kHz to 1 kHz, it will keep doing this in a continuous loop until the power is removed from the unit. The key elements of the invention are the design of a closed coil, used to produce the magnetic field, and the use of a microprocessor for the generation of the swept output signal that is required to break up the hydrocarbon chains within the fuel and also for the transfer of kinetic energy to the hydrocarbon molecules.

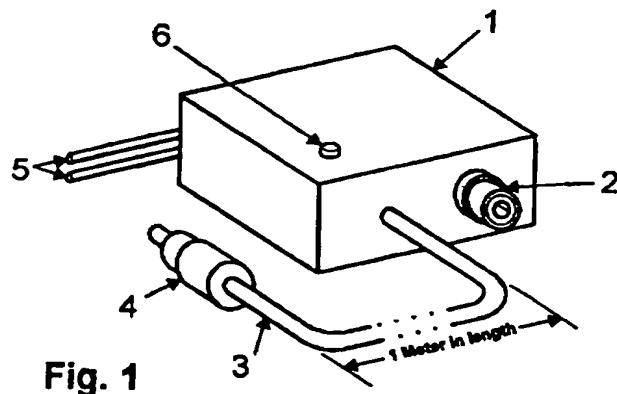


Fig. 1

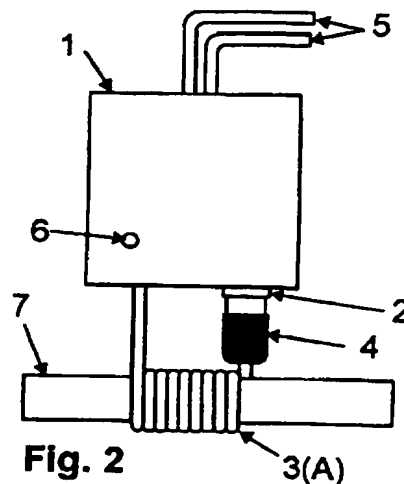
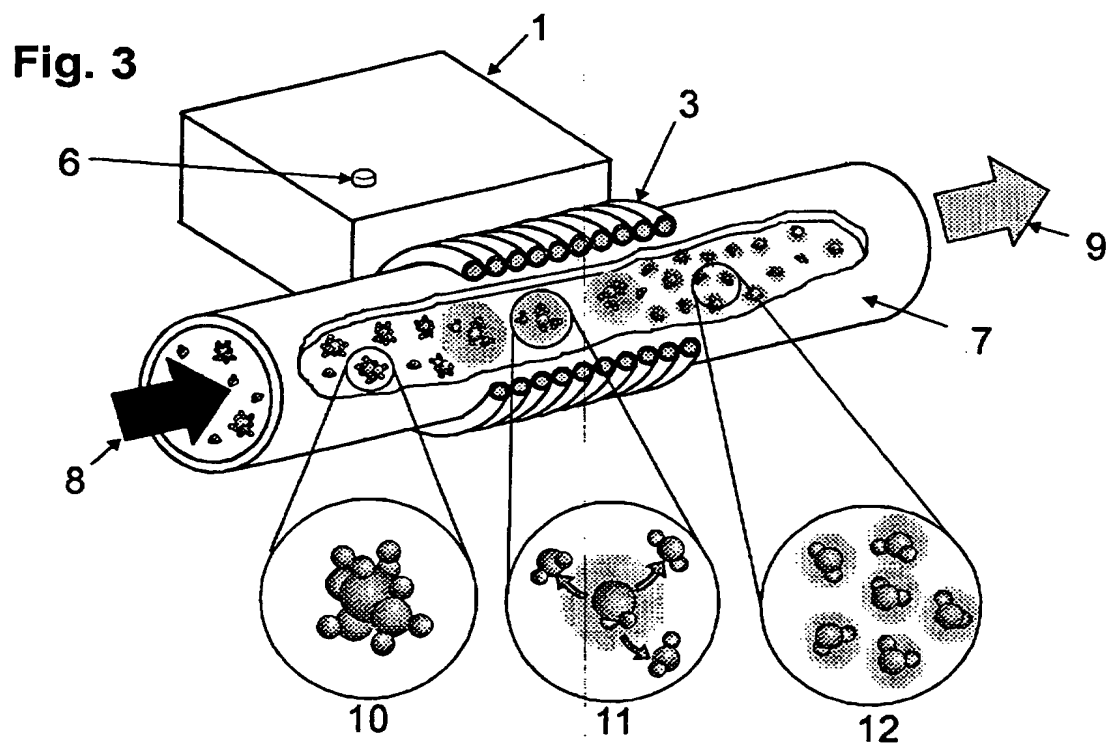
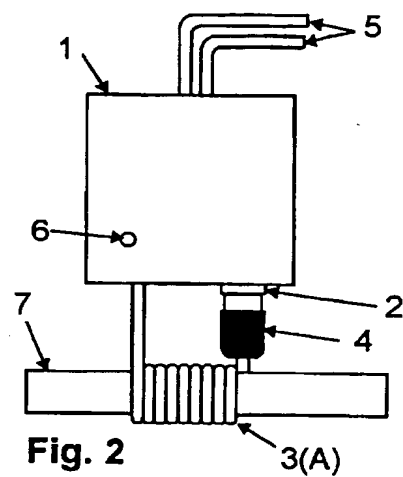
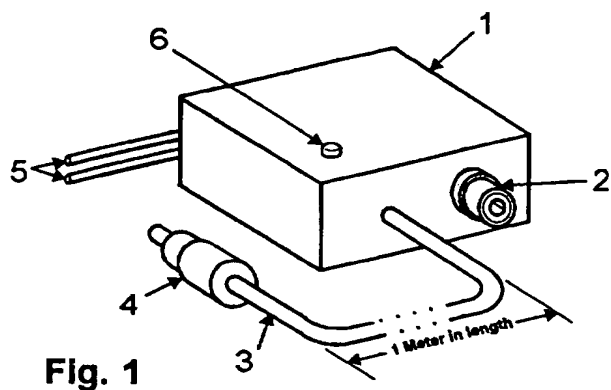


Fig. 2

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## MICRO PROCESSOR CONTROLLED FUEL ENERGIZER

This invention relates to a Micro Processor controlled fuel energizer.

The main problem with Hydrocarbon based fuel, is the molecular structure that make up the matrix of the fuel, 25% of this matrix is formed out of hydrocarbon molecules which have bonded together to form chains. These large hydrocarbon chain's can not be used within an internal combustion engine, due to there size. By passing the fuel through a magnetic field, the hydrocarbon chains are broken up into a size that is more suitable for the engine to use. The second problem with fuel is the ability for the hydrocarbon molecules to bond or attract an oxygen molecule which it needs to be able to burn within the combustion chamber. A second force obtained by passing the fuel through a magnetic field, is that of a kinetic type which give the hydrocarbon molecules the ability to attract the oxygen molecules that it needs to burn.

Existing methods of producing a magnetic field, to effect the hydrocarbon chains are in the use of high powered, focused 'fixed' magnets. But tests have shown that only 5% of the magnetic field has any affect on the hydrocarbon chain's, this is based on the theory of 'nuclear magnetic resonance in liquid crystals', and have shown that the correct magnetic field, required to fracture the bond's within the hydrocarbon chain's, has to be an alternating field frequency of -7KHz and +7KHz.

The present invention provides the solution to the problem of generating the correct alternating field that is required to fracture the bonds within the hydrocarbon chain's, and also to add a kinetic energy to the hydrocarbon molecule's to aid them to burn more efficiently within the combustion chamber.

A specific description on the function of the invention will now be described by way of example with reference to the accompanying drawing's in which :-

Figure 1 illustrates the main working parts of the unit.

Figure 2 illustrates how the unit is connected to a fuel line.

Figure 3 illustrates principle theory of how the unit works.

Referring to the drawing's ( fig. 1 & 2 ) the body 1, houses the electronic components including the microprocessor. The one meter cable 3 is wound around the main fuel line in a vehicle, and the plug 4 is then plugged into the socket 2, to form a closed loop coil 3(A). Once the coil has been formed out of the cable 3, the supply cables 5 are then connected to the battery on the vehicle, to power the unit. When connected to the battery the status light 6 will then start to flash to indicate that the unit is functioning correctly.

Once installed the unit will start to run a computer program, which is embedded within the microprocessor chip. When the program starts it will run a test program to make sure the installation has been carried out correctly and if so, will then start to generate the coil 3(A) signals that are required to break up the hydrocarbon chains 10 ( Fig.3 ), contained within the fuel 8 being treated. The coil 3(A) signals are generated by the microprocessor which in turn, turns on a power transistor supplying an amplified signal to the coil 3(A). Once the unit is running, and the large hydrocarbon chains 10 are being broken down into smaller parts 11, the kinetic energy generated by the coil 3(A) is partly transferred to the hydrocarbon molecules 12, giving them an energy that will attract oxygen molecules, which once they enter the combustion chamber of the vehicles engine, will burn 100% more efficiently than they would if they had not been broken up and charged with kinetic energy, test report's show that up to 25% of all fuel will pass through the engine with out being used, and ending up as carbon monoxide CO and carbon dioxide CO<sub>2</sub> which are, a by-product of unused hydrocarbon fuels and are very harmful to man and the environment.

The theory incorporated into the main design of the fuel energizer was based on Faraday's theory of 'MagnetohydroDynamics' and is a key factor in the operation of the unit.

### CLAIMS

- 1        An Electronic Microprocessor based fuel energizer wherein a 'closed coil design' is used to produce the correct magnetic field required to fracture or break apart the hydrocarbon chain's contained in all hydrocarbon based fuel's.
- 2        An electronic Microprocessor based fuel energizer as claimed in Claim 1 wherein the main closed coil configuration has been designed to obtain the maximum available magnetic field required to transfer the kinetic energy to the hydrocarbon molecule's.
- 3        An electronic Microprocessor based fuel energizer as claimed in Claim 1 or Claim 2 wherein the design of the computer program that generates the magnetic field signals use's a swept frequency output to ensure that the crystalline structure's of the hydrocarbon fuel, will resonate and break-up at the right frequency ( -7Khz to +7Khz ).



Application No: GB 9901800.4  
Claims searched: 1, 3

Examiner: John Twin  
Date of search: 11 October 1999

**Patents Act 1977**  
**Search Report under Section 17**

**Databases searched:**

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.Q): F1B (B2L4X)

Int CI (Ed.6): F02M 27/04

Other: online: EPODOC, JAPIO, WPI, TXTUS, TXTEP, TXTGB, TXTWO

**Documents considered to be relevant:**

| Category | Identity of document and relevant passage         | Relevant to claims |
|----------|---|--------------------|
| X        | GB 2290110 A (Easter) - see eg page 4, lines 9-12 | 1                  |
| X        | US 5829420 (Magnetizer) - see eg fig.1            | 1,3                |
| X        | US 5236670 (Iwata)                                | 1                  |

X Document indicating lack of novelty or inventive step  
Y Document indicating lack of inventive step if combined with one or more other documents of same category.  
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A Document indicating technological background and/or state of the art.  
P Document published on or after the declared priority date but before the filing date of this invention.  
E Patent document published on or after, but with priority date earlier than, the filing date of this application.